



IRISH CATTLE BREEDING FEDERATION

Tully Central Progeny Test Centre

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8th June 2012

Background

- ❖ Beef breeding review (2011)
- ❖ Tully
 - ✓ Cost/benefit analysis of beef genetic improvements options for Tully
- ❖ Commercial animals most viable option going forward

Background cont'd

❖ Tully

- ✓ Previous role
 - Performance test elite bulls
 - Selected based on Euro-Stars and age
 - Purchased by A.I

❖ GENE IRELAND program

- ✓ Structured progeny test program for bulls
 - Increases reliability quickly for key traits
- ✓ Launched in 2007
- ✓ Bulls selected for combination of beef and maternal traits

Objective

Transfer of Tully from bull performance testing centre to testing commercial progeny



Selection Process

- ❖ Capacity for 250 animal per intake at present
- ❖ Initial selection: (database)
 - ✓ Progeny from GENÉ IRÉLAND bulls
 - ✓ Based on age (gender)
 - ✓ Bulls (n = 100)
 - ✓ Sire & MGS recorded
- ❖ Further selection: (on-farm)
 - ✓ Based on weight & health
- ❖ Additional selection criteria:
 - ✓ 10-15 progeny per sire
 - ✓ Higher numbers for recording female fertility traits
 - ✓ Adequate semen availability

Progeny available

- ❖ GI Bulls <90% reliability on SBV
 - ✓ Currently 42 GI Bulls
 - ✓ 29 have progeny (1st May 11 to 31st Aug 11)
 - ✓ 2072 males and females

- ❖ Proposed edits:
 - ✓ Only target animals with <100% breed fraction
 - ✓ Remove all animals with a pedigree name
 - ✓ Only include animals with a MGS recorded

- ❖ 942 male progeny (345 after edits)

Progeny available

- ❖ Reference sires
 - ✓ Create good genetic links
- ❖ 14 GI Bulls >90% reliability for SBV
 - ✓ 3631 progeny
 - 1st May 2011 and 31st Aug 2011
 - ✓ 1696 male progeny
 - 584 after edits
- ❖ 12 bulls on the Active Bull List
 - ✓ Adequate semen available
 - ✓ CH = MVO (266 progeny)
 - ✓ LM = CVV (441 progeny)
 - ✓ SI = DRU (166 progeny)

Purchasing of animals

❖ Purchasing Information:

- ✓ Displayed on the ICBF website
- ✓ Based on market value for 5 star progeny
- ✓ Updated every week
- ✓ Minimum of 3 animals per farm
- ✓ Work with group of 25-35 herds initially
- ✓ Subject to parentage testing for sire

Potential dates

- ❖ 20th June: Contact farmers with eligible animals
- ❖ 28th June: Start on-farm purchasing/inspections
- ❖ 15th July: Start adoption period at Tully
- ❖ 15th August : Start performance test
- ❖ 15th November 2011: Finish performance test
- ❖ End of test : Animals sent to the factory

Management

❖ Health:

- ✓ IBR, BVD, RSV, PI3, Pasteurella, Blackleg & other clostridia diseases
- ✓ Export T.B test – on-farm

❖ Diet:

- ✓ Standard commercial diet to include roughage

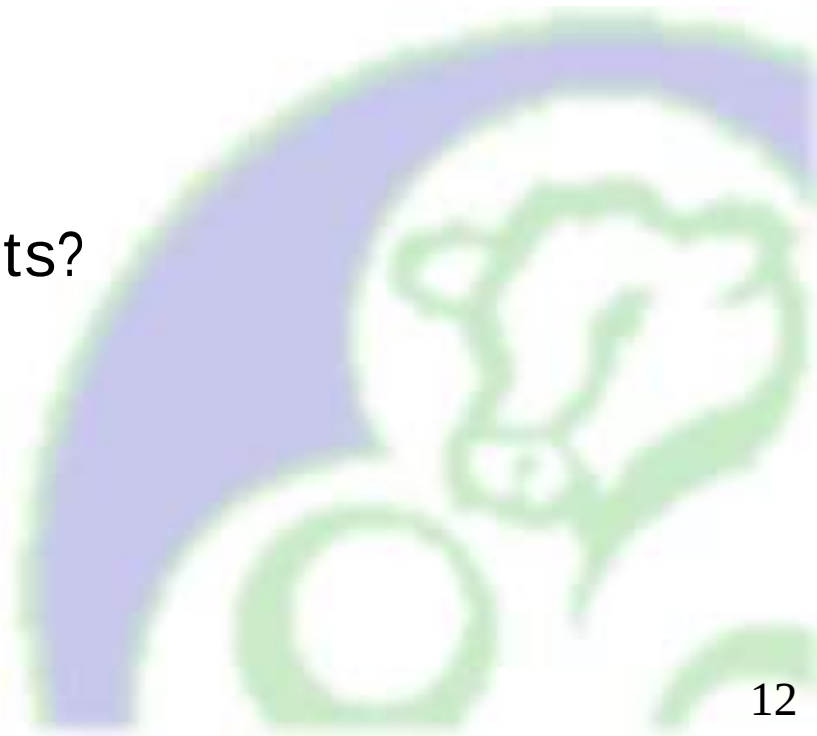


Measurements

- ❖ 90-day testing period
- ❖ Traits recorded:
 - ✓ Average daily gain (kg/day)
 - ✓ Feed conversion efficiency (DMI/ADG)
 - ✓ Linear scores
 - ✓ Scanned muscle and fat depth (mm)
 - ✓ Scrotal circumference (cm)
 - ✓ Carcass grades
 - ✓ Genomics

Novel traits

- ❖ Meat eating quality
 - ✓ Colour, pH, tenderness, taste etc
- ❖ Health traits
 - ✓ Disease resistance
- ❖ Potential female fertility traits?
- ❖ What other traits?



Overall Benefits

- ❖ Increased reliability & accuracy in proofs of AI sires
 - ✓ Pedigree mating are 70% AI
- ❖ Renewed role in demonstration & education
- ❖ Additional data collected
- ❖ Validate genomics in Beef
- ❖ Increased profit for farmers

Where to next?

- ❖ Large Industry project
 - ✓ Collaboration required
 - ✓ Utilise all our resources

- ❖ Identify key phenotypes for:
 - ✓ Carcass and meat eating quality
 - ✓ Health
 - ✓ Welfare & others

- ❖ Identify trait priorities

- ❖ Feedback welcome





Thank You!